

THURSDAY, JULY 19, 1883

CHOLERA PROSPECTS

THE early history of cholera is involved in a good deal of obscurity, and it was not until 1817, when the disease caused a terrible mortality amongst our troops in India, and subsequently spread into different parts of the Asiatic continent, that any noteworthy attention was given to it by European observers. It is very possible that even previous to the present century cholera had made its way into Europe, but the first trustworthy record of its course westwards was in 1831, when it travelled by way of Russia and the Baltic, and, as far as we know, made its appearance for the first time in England. In the following year it became widely prevalent in this country. In the years 1848-49, and again in 1853-54, cholera travelled to Europe and England from the East, taking much the same route as it did in 1831-32. The last outbreak from which we have suffered was in 1865-66, the disease being imported into Southampton in 1865, and reappearing both in the metropolis and in several other parts of the United Kingdom in the following year. But on this occasion the infection for the first time reached us through Egypt, having travelled there in the track of the Mohammedan pilgrims, who were on their return from Mecca, and being then distributed along the lines of steamboat traffic which, starting from Alexandria as a centre, radiate towards ports in the Mediterranean and on our own shores. In 1866 the disease became epidemic in the metropolis, and its special incidence in the East End was shown to be in the main due to the polluted character of the water delivered to that part of London.

The disease is once more prevalent in Egypt; it has already caused over 2000 deaths in a few towns in the delta of the Nile, and the prospect of its spread to the several ports of Europe is regarded with universal concern.

The etiology of cholera, in so far as relates to its influence in this country, does not admit of much doubt. The infection must be actually imported into our midst; it has never yet been imported except through human agency, and the poison appears to be all but, if not entirely, limited to the discharges from the bowels and to the matter vomited by the patients. Where these go the poison goes; hence sewers and drains receiving them tend to become channels for conveying the disease; soil fouled by them may, by leading to the pollution of well and other waters, as also by aerial emanations, favour its diffusion; and, to a less extent probably, the bed-linen and personal clothing of the sick may become vehicles of infection. In all essential respects the disease appears to spread under much the same conditions as favour the spread of enteric or typhoid fever, and, like that disease, it has in this country mainly been associated with the use of water supplies, which have been subjected to the risk of receiving the specific infection. What that infection consists in is not yet known, but judging from analogy it is a definite organism capable of reproducing its own kind under those conditions of filth which we have adverted to as being associated with the spread of

the disease. In the case of anthrax, which causes the so-called wool-sorter's disease in man, and in the case of relapsing or famine fever, the microscope has succeeded in showing the organisms which lead to the production of those specific affections; but in the case of cholera no such results have as yet been attained, and this notwithstanding the laborious microscopic and other researches which have been made in India and elsewhere.

Having regard to the fact that cholera is as yet confined to Egypt, and that any spread may be expected to follow on the lines of human intercourse, the most obvious means of staying its spread to this country would at first sight appear to consist in quarantine measures. Such measures are already in force all along the Mediterranean, and even on the Atlantic coasts of Portugal, Spain, and France, but England has decided to adopt no such course, and our Government have acted wisely in arriving at this decision. Quarantine, in order to be efficient, must exclude all the healthy as well as the sick who arrive in our ports after having passed through the infected area, and if there be really reason to believe that vessels so arriving contain within them the germs of infection, and that those on board are liable to contract cholera, the result of detaining suspected fleets of merchant and passenger ships at the entrance of our ports until the last of those who are susceptible have suffered from the disease can be more readily imagined than described. In point of cruelty and selfishness such a practice could probably not find its equal. But, as a matter of fact, quarantine invariably fails to effect its intended purpose; those countries which practise it most rigidly are those to which cholera has almost invariably spread, and the line of loaded rifles and fixed bayonets by which quarantine measures have surrounded Damietta and Mansurah, the two first towns infected in Egypt, have certainly not succeeded in preventing extension of the disease along the lines of railway in the direction of Cairo and of Alexandria. For some thirty years we in England have trusted to a different system; and that system, which is known as one of "medical inspection," has received the formal assent of the delegates of the Cholera Conference which met at Vienna in 1866. Instead of herding the healthy together with the sick, we endeavour to deal with the sick and their infected things in such a way as to prevent the spread of infection to the healthy. To take an example. A ship arrives from Port Said in the Thames. Off Gravesend it is boarded by a Customs officer, to whom written statements as to the health of all present or previous passengers must be made. If any case either of cholera or of suspicious diarrhœa has occurred, the vessel is detained for a period sufficient to allow of a medical examination of all passengers and the crew by an official of the Port Sanitary Authority, who in turn have power to remove to their hospital ship all infectious patients, to detain for a period of probation all suspicious cases of sickness, and to disinfect the vessel and all infected articles. The really healthy are however permitted to land, and the vessel itself is detained no longer than is needed in the interests of health.

So far as the importation of the disease is concerned, our national system tends to greater security than a process of rigid quarantine, which would certainly be evaded

as it has been heretofore. It remains for all who are concerned to see that our water sources, whether public or private, shall be free from all risk of contamination, and so to arrange our means of house and of public drainage as to secure all dwellings against the entrance of sewer air into them. Much has been done in these directions since cholera last threatened our shores, but more remains to be done if we are to rid ourselves of all the conditions which will tend to favour the spread of that disease should it succeed in finding an entrance into our country.

MODERN PERSIA

The Land of the Lion and Sun: or, Modern Persia. By C. J. Wills, M.D. (London: Macmillan and Co., 1883.)

ONE of the "Fathers," the great Austin we believe of Hippo, when asked which was the first Christian virtue, replied, Humility! And the second? Humility! And the third? Still Humility! So Dr. Wills would seem consciously or unconsciously to think that of travellers the first, second, and third virtue is *anecdote*! The result of this belief is one of the most graphic and entertaining books of travel ever published. With anecdote it begins, with anecdote it ends, and its substance is anecdote, and all these endless anecdotes are themselves distinguished by three cardinal virtues. They are characteristic, they are well told, and they are infinitely varied. By way of experiment we have opened the book at haphazard at twelve different places, and at every place there was an anecdote, some pithy story or other illustrating the social customs and habits of the Persians and even of the very plants and animals of the Iranian world, where the author's lot was cast for the space of fifteen years (1866-1881) as "one of the medical officers of Her Majesty's Telegraph Department in Persia." On one of the pages thus exposed occurs the subjoined incident bearing directly on the "scorpion controversy" recently carried on in the correspondence columns of NATURE:—

"A story was told me by the late Dr. Fagergren, a Swede who had been twenty-five years in Shiraz, to the effect that scorpions, when they see no chance of escape, commit suicide; and he told me that when one was surrounded by a circle of live coals, it ran round three times and then stung itself to death. I did not credit this, supposing that the insect was probably scorched and so died. I happened one day to catch an enormous scorpion of the black variety, and to try the accuracy of what I supposed to be a popular superstition, I prepared in my courtyard a circle of live charcoal a yard in diameter. I cooled the bricks with water, so that the scorpion could not be scorched, and tilted him into the centre of the open space. He stood still for a moment, then to my astonishment ran rapidly round the circle three times, came back to the centre, turned up his tail where the sting is, and deliberately by three blows stabbed or stung himself in the head; he was dead in an instant. Of this curious scene I was an eye-witness, and I have seen it repeated by a friend in exactly the same way since, on my telling the thing, and with exactly the same result. For the truth of this statement I am prepared to vouch" (p. 249).

More startling is the account at p. 307 of the "house-snake and sparrow."

"One morning I heard a great twittering of birds, and on looking out I saw some thirty sparrows on the top of a half-wall. They were all jumping about in a very excited manner, and opening their beaks as if enraged, screaming and chattering. Presently I saw a pale-yellow coloured snake deliberately advancing towards them from the ornamented wooden window from which he hung. They appeared *all* quite fascinated, and none attempted to fly away. The snake did not take the nearest, but deliberately chose one and swallowed him. I got my gun, and notwithstanding the entreaties of my servants, some of whom wept, assuring me that the reptile was inhabited by the late master of the house, I gave him a dose of duckshot. He was a big snake, some four feet long. I cut him open and extracted the sparrow. After some ten minutes' exposure to the sun, the bird got up, and after half an hour flew away apparently unhurt. The snake was not a venomous one, nor do we find venomous ones in houses in Persia."

Suitable also for the columns of a *scientific* journal may be the subjoined about the "transit of Venus":—

"On the high road to the capital from the Caspian the members of the expedition sent by the German Government to observe the transit of Venus met a lovely vision in habit and hat on a prancing steed. They halted, saluted, and declared their errand.

"To observe the transit of Venus, ah, well, you can go home now, gentlemen, *your duty is done*, good bye;' and the pretty vision disappears at a smart canter 'away in the ewigkeit,' as Hans Breitmann says. *That* joke dawned on those Germans after some hours" (p. 331).

Dr. Wills has naturally a good deal to say about the Persian system of medicine, which "has its advantages in its delightful simplicity. All diseases are cold or hot. All remedies are hot or cold. A hot disease requires a cold remedy, and *vice versa*. Now if the Persian doctor is called in, and has any doubt as to the nature of the disorder, he prescribes a hot treatment, let us say. If the patient gets better, he was right; if worse, then he prescribes a cold remedy, and sticks to it. He thus gets over all need for diagnosis, all physiological treatment, and he cannot, according to his own lights, be wrong. . . . His fee is a few pence, or more generally he undertakes the case on speculation: *so much*, of which he is lucky if he gets half, if the patient gets well; nothing if he doesn't. . . . Remedies and contrivances of a barbarous nature, such as putting the patient in fresh horse-dung, or sowing him up in a raw hide, are the rule rather than the exception" (p. 34).

Talismans, spells, and charms of all sorts are also much relied upon, in connection with which a characteristic story is told:—

"During the cholera in Shiraz I was attending the daughter of the high priest, who was sitting surrounded by a crowd of friends, petitioners, and parasites. He was writing charms against the cholera. I, out of curiosity, asked him for one; it was simply a strip of paper on which was written a mere scribble, which meant nothing at all. I took it and carefully put it away. He told me that when attacked by cholera I had but to swallow it and it would prove an effectual remedy. I thanked him very seriously, and went my way. That day he called and presented me with two sheep and a huge cake of sugar-candy weighing thirty pounds! I did not quite see why he gave me the present, but he laughingly told me that my *serious* reception of his talisman had convinced the many bystanders of its great value, and a charm desired by an unbelieving European doctor must be potent indeed. 'You see, you might have laughed at my